

IN THE CLAIMS:

Please amend claims 5, add the following new claims 15-33.

1. (Original) A method for closing an opening extending through annulus fibrosis into an interior of a spinal disc, the method comprising:

creating an opening through the annulus fibrosis into the interior of the disc;

performing a procedure within the interior of the disc; and

applying energy to tissue surrounding the opening to substantially close the opening.

2. (Original) The method of claim 1, wherein the step of performing a procedure comprises removing at least a portion of the nucleus pulposus material from the interior of the spinal disc.

3. (Original) The method of claim 1, wherein the step of performing a procedure comprises introducing an implant within the interior of the spinal disc.

4. (Original) The method of claim 1, wherein the step of performing a procedure comprises introducing a therapeutic agent into the interior of the spinal disc.

5. (Currently Amended) The method of claim 1, wherein the step of applying energy comprises applying radio frequencyRF energy.

6. (Original) The method of claim 1, wherein the step of performing a procedure comprises introducing a distal portion of an elongate member into the interior of the disc.

7. (Original) The method of claim 6, wherein the step of applying energy comprises:

disposing an energy element on the distal portion of the elongate member within the opening; and

activating the energy element within the opening.

8. (Original) The method of claim 7, further comprising withdrawing the distal portion of the elongate member through the opening while the energy element is activated.

9. (Original) The method of claim 6, wherein the step of performing a procedure comprises:

inserting a distal end of a needle through tissue to a predetermined location within a patient's body; and

delivering a therapeutic agent through a lumen of the needle to the predetermined location.

10. (Original) The method of claim 9, wherein the step of applying energy comprises:

inserting an energy element into the lumen until an electrode on a distal tip of the energy element extends beyond the distal end of the needle; and

delivering electrical energy from a source of electrical energy via the electrode to tissue surrounding the electrode to substantially close the passage.

11. (Original) The method of claim 10, wherein the step of inserting an elongate element into the lumen comprises connecting a handle member to a proximal end of the needle, the elongate element extending from a distal end of the handle member.

12. (Original) The method of claim 11, wherein:
the needle comprises an electrically conductive material, and the elongate element comprises an electrically insulated outer surface that extends through the needle; and
the handle member comprises an electrically conductive region that is coupled to the needle when the handle member is connected to the needle, the conductive region being coupled to the source of electrical energy.

13. (Original) The method of claim 12, wherein the step of delivering a therapeutic agent comprises injecting the therapeutic agent through the lumen from a syringe connected to the proximal end of the needle.

14. (Original) The method of claim 13, further comprising disconnecting the syringe from the proximal end of the needle before connecting the handle member to the proximal end.

15. (Currently Amended) A method for treating a spinal disc of a patient, the spinal~~final~~ disc comprising annulus fibrosis and nucleus pulposus with an anterior region defined by the annulus fibrosis, the method comprising:

removing at least a portion of the nucleus pulposus material from the interior region to define a space, wherein the step of removing comprises creating an opening in the annulus fibrosis to access the interior region of the annulus fibrosis;

lining the space with a substantially nonporous, bioabsorbable liner material;

filling the space with a fill material sufficient to cause the liner material to expand to substantially engage tissue surrounding the space; and

closing the opening after filling the space with fill material, wherein the closing step comprises applying energy to annulus fibrosis tissue surrounding the opening.

16. (Previously Presented) The method of claim 15, wherein the fill material comprises nucleus pulposus.

17. (Previously Presented) The method of claim 16, wherein the nucleus pulposus used to fill the space comprises nucleus pulposus removed from the disc.

18. (Previously Presented) The method of claim 15, wherein the fill material comprises a naturally occurring extra-cellular matrix.

19. (Previously Presented) The method of claim 18, wherein the extra-cellular matrix material comprises at least one of intestinal submucosa, stomach submucosa, or bladder submucosa.

20. (Previously Presented) The method of claim 15, wherein the fill material comprises an autologous therapeutic agent.

21. (Previously Presented) The method of claim 15, wherein the autologous therapeutic agent comprises a concentrated growth factor derived from centrifuged plasma of the patient.

22. (Previously Presented) The method of claim 15, wherein the space is filled with a material comprising interpenetrating polymer network (IPN) material.

23. (Previously Presented) The method of claim 15, wherein the liner material comprises a substantially nonporous, bioabsorbable bladder, wherein the step of lining the space comprises introducing the bladder within the space, and wherein the step of filling the space comprises filling the bladder with a fill material sufficient to cause the bladder to expand to substantially occupy the space.

24. (Previously Presented) The method of claim 23, wherein the bladder comprises an extra-cellular matrix material.

25. (Previously Presented) The method of claim 24, wherein the extra-cellular matrix material comprises at least one of intestinal submucosa, stomach submucosa, or bladder submucosa.

26. (Previously Presented) The method of claim 15, wherein the liner material comprises a sheet of naturally occurring extra-cellular matrix material.

27. (Previously Presented) A method for treating a spinal disc of a patient, the spinal disc comprising annulus fibrosis and nucleus pulposus within an interior region defined by the annulus fibrosis, the method comprising:

removing at least a portion of the nucleus pulposus material from the interior region to define a space, wherein the step of removing the nucleus pulposus comprises creating an opening in the annulus fibrosis to access the interior region of the annulus fibrosis;

lining the space with a substantially nonporous liner material;

filling the space with a fill material sufficient to cause the liner material to expand to substantially engage tissue surrounding the space, the fill material comprising at least some of the nucleus removed from the disc; and

closing the opening after filling the space with fill material, wherein the closing step comprises applying energy to annular fibrosis tissue surrounding the opening.

28. (Previously Presented) The method of claim 27, wherein the fill material further comprises at least one of naturally occurring extra-cellular matrix material, saline, a

pharmaceutical, an autologous therapeutic agent, a concentrated growth factor derived from centrifuged plasma of the patient, or genetic material.

29. (Previously Presented) The method of claim 27, wherein the step of lining the space comprises introducing a sheet of substantially nonporous, bioabsorbable material into the space.

30. (Previously Presented) The method of claim 27, further comprising introducing a flowable fill material into the interior region before introducing the lining the interior region.

31. (Previously Presented) The method of claim 30, wherein the flowable fill material comprises naturally occurring extra-cellular matrix material.

32. (Currently AmendedNew) The method of claim 31, wherein the flowable fill material comprises a slurry further comprising at least one of saline, an antibiotic, a steroid, and an non-steroidal anti-inflammatory drugsaid.

33. (Previously Presented) The method of claim 30, wherein the flowable fill material comprises an autologous therapeutic agent.